

REMARKS

I. Introduction

In response to the Office Action dated May 7, 2004, claims 7, 15, 25, and 35 have been canceled, claims 1, 9, 17, 19, 27, 37, and 44 have been amended, and new claims 45-62 have been added. Claims 1-6, 8-14, 16-24, 26-34, and 36-62 are in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. The Cited References and the Subject Invention

A. The Ito Reference

After a digital content is loaded into an information terminal such as a PC, ID information unique to a viewer or a user of the PC is imprinted into the content. The ID information is imprinted into a predetermined location of the content or alternatively, it may be imprinted over the entire content in the form of a spatial frequency. The content with an ID added thereto is then enabled to be used in the terminal.

B. The Kimura Reference

A receiving device comprises a signal demodulator circuit for demodulating an encrypted video signal and attribute information including information for decoding an encryption, an attribute information identifying circuit for identifying and outputting the attribute information, and a descramble circuit for unscrambling the video signal obtained from the signal demodulator circuit, based on the output produced from the attribute information identifying circuit. A signal re-scrambled in accordance with a device ID signal is recorded in a recording and reproducing device. Further, the recording of the signal is controlled based on the output obtained from the attribute information identifying circuit.

C. The Narayanaswami Reference

An image capturing system and method for automatically watermarking a plurality of recorded camera and image parameters such as the location (latitude, longitude and altitude), orientation of the principal axis of the camera, whether the camera is in landscape mode or portrait mode, camera velocity, photographer information, time and date, zoom factor, shutter speed, flash on/off, autofocus distance, lightmeter reading, focal length and aperture into every captured image.

This watermarked data can be subsequently extracted and compared with the originally recorded data so as to verify the authenticity of a corresponding image. Since the critical data is invisibly watermarked into the image, it is difficult to modify the image without affecting the watermarked data.

III. Office Action Prior Art Rejections

In paragraph (1), the Office Action rejected claims 19 and 20 under 35 U.S.C. § 102(c) as unpatentable over Ito. In paragraph (2), the Office Action rejected claims 1, 2, 6-10, 14-18, and 24-30 under 35 U.S.C. § 103(a) as unpatentable over Ito in view of Kimura. In paragraph (3), the Office Action rejected claims 3-5, 11-13, 31-33, and 41-43 as unpatentable over Ito in view of Kimura and in further view of Narayanaswami. The Applicants respectfully traverse these rejections.

The independent claims have been amended to recite features analogous to those canceled claims formerly recited in canceled claims 7, 15, 25, and 35. Referring first to claim 1:

*A television system comprising:
a receiver for receiving broadcast television content comprising multiple frames of data;
means for inserting multiple copies of receiver identification data into data representing a frame of the television content; and
means for generating a display of television images based upon the data representing the television content and the receiver identification data.*

The Applicants respectfully assert that the foregoing features are not disclosed or taught by any of the references of record. In particular, none of the references teach inserting multiple copies of the receiver identification data into data representing a frame of the television content.

The scope of amended claim 1 is somewhat analogous to that of canceled claim 7 in that both recite that multiple copies of the receiver identification data are inserted into a single frame. According to the Office Action, this feature is disclosed in the following portion of Ito:

[0047] Second, although a still image is used in the above-described embodiments as an example of a digital content, the methods may be applied to other types of digital content, such as motion images (e.g. video) or audio content. For motion images, ID information may be divided into plural portions and different portions may be imprinted into different image frames. For audio content, the image decoder 14, the display controller 20, and the display 24 in FIG. 3 may be replaced by an audio decoder, an audio output controller, and a speaker, respectively. Further, one-dimensional IFFT is sufficient for audio content, as it is one dimensional data. In addition, although ID information is imprinted into the bits of the luminance values in the case of images, it may be imprinted into the LSBs of frequency signals or the like in the case of an audio content.

Respectfully, the foregoing teaches spreading ID information into several image frames, not placing multiple copies of ID information into a single frame. This, in fact, teaches the opposite of the invention described in amended claim 1.

Claims 9, 19, 27, 37 and 44 recite analogous features, and are patentable on the same basis.

IV. Dependent Claims

The dependent claims incorporate the limitations of their related independent claims, and are therefore patentable on this basis. In addition, these claims recite novel elements even more remote from the cited references. Accordingly, the Applicants respectfully request that these claims be allowed as well.

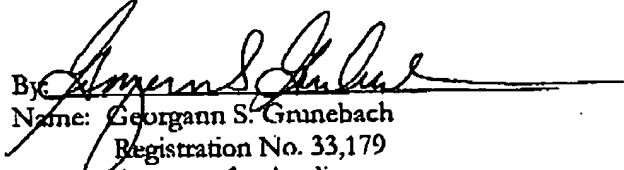
V. New Claims

New claims 45-62 are presented for the first time in this Amendment. For the reasons described above, these are patentable over the prior art of record. These claims also recite further features rendering them even more remote from the references of record, as none of the references of record teaches or suggest dividing each frame into groups and inserting a copy of the receiver information into each one of the groups. Likewise, none of the references of record teaches repeatedly substituting a bit of the receiver identification for a bit of a pixel in a line, separated by a plurality of pixels. Accordingly, the Applicants respectfully request the allowance of these claims as well.

VI. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicants' undersigned attorney.

Respectfully submitted,

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